

Amendments to the Specification:

Please replace paragraph 0008 with the following amended paragraph:

[0008] According to one embodiment of the invention, a method of updating a supply plan used to process customer requests in an available-to-promise (ATP) system comprises updating a model of a supply chain process for one or more products sold by the ATP system and copying an old supply plan used by the ATP system to process customer requests to create a second supply plan. Thereafter, a first plurality of customer requests are received and orders from the requests are processed by the ATP system against the old supply plan while the updated model of the supply chain process is run with the second supply plan as part of a process that creates a new supply plan. After the new supply plan is created, the new supply plan is synchronized with the old supply plan by synchronizing orders from the first plurality of customer requests scheduled against the old supply plan into the new plan while order promising continues against the old plan. The synchronizing process is stopped prior to synchronizing all the orders in the first plurality of requests into the new supply plan. Thereafter, all remaining orders from the first plurality of requests not synchronized during the synchronizing process are synchronized into the new supply plan while the ATP system temporarily stops promising orders. After the remaining orders from the first plurality of requests are synchronized, the old supply plan is replaced by the new supply plan so that the ATP system processes future customer requests against the new supply plan.

Please replace paragraph 0022 with the following amended paragraph:

[0022] Thus, as can be appreciated by a person of skill in the art, supply plan 24 is an important part of system 10 for enabling order promising component 20 to accurately fulfill customer requests. That is, system 10 needs access to supply plan 24 on a 24 hour a day, seven day a week basis in order to respond to customer requests in real time with promises of future delivery dates. Because the accuracy of promises made by system 10 is directly related to the accuracy of supply plan ~~1024~~, it can be appreciated that it is important to update supply plan 24

on a regular basis.

Please replace paragraph 0023 with the following amended paragraph:

[0023][0001] Updating supply plan 24 typically includes updating, adding and/or deleting the supply information used by the organization to model its supply chain for the product(s) offered by the organization. Thus, updating supply plan 24 entails first updating the model that defines ~~for~~ resource and materials requirements, resource and materials allocation, resource and materials constraints, sourcing strategies, etc. After the model is updated, the model is run on real data from the current, and soon to be old, supply plan 24 to produce a new supply plan 24. As previously mentioned, the process of running the model on real data may take several hours or longer, which in some previously known ATP systems resulted in the systems being unable to process customer requests during the entire lengthy supply plan update process.

Please replace paragraph 0032 with the following amended paragraph:

[0032] As can be appreciated from the above, the synchronization program needs to be able to track which orders were received and processed after time t_0 . In one embodiment this is done by tracking a refresh number that increases sequentially in time. A new refresh number is assigned for each request and a refresh number is assigned to the start of the data collection block in Fig. 2. Multiple orders within a single request receive the same refresh number. Using this technique, system 10 can quickly tell if an individual order was processed before or after the data collection step by comparing the refresh number of the order with the refresh number of the event. This technique can also be used to allow system to calculate how many orders have been processed since the data collection step or any other given event that has a refresh number associated with it.

Please replace paragraph 0033 with the following amended paragraph:

[0033] The synchronization process also needs to distinguish between records that have

been synchronized and records that still need to be synchronized. One embodiment of the invention keeps track of this information with a flag that is set whenever a record is synchronized against the data in the new supply plan. Thus, in this embodiment, only those records that have a refresh number greater than the one associated with time t_0 and have their synchronization flag not set will be considered for synchronization. A person of skill in the art will appreciate many different techniques that can be used to track whether orders were promised before or after the start of the supply plan updating process and whether any such orders have already been synchronized.

Please replace paragraph 0035 with the following amended paragraph:

[0035] There may be instances where the synchronization process of steps ~~6062~~ and ~~6466~~ determines orders promised versus the old plan cannot be kept based on the new plan. In such instances where an already scheduled delivery date cannot be met with the new plan, an exception is raised and a message indicating such is available for the planner to review. In some embodiments a message to the planner is automatically generated and sent in response to such an exception.

Please replace paragraph 0038 with the following amended paragraph:

[0038] Having fully described several embodiments of the present invention, other equivalent or alternative methods of practicing the present invention will be apparent to those skilled in the art. For example, while system 10 was described as including allocation rules 22, such rules are optional. In some embodiments of the invention order processing component 20 fulfills orders based on a supply plan 24 without checking allocation rules. Also, in another embodiment where allocation rules 22 are used, system 10 includes ~~and~~ an allocated supply plan (not shown) that is used by order processing component 22 to fulfill orders instead of supply plan 24. The allocated supply plan is created from a combination of the allocation rules 22 and supply plan 24 and saved separate from each. Also, in other embodiments, the creation of a

Appl. No. 10/612,257
Amdt. dated January 6, 2005
Preliminary Amendment

PATENT

summary table in step 60 is optional.